

# Hacktech 2025



April 25-27, 2025

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# General Information

## Check-in:

- **Check-in will be from 5:00 to 7:00 PM.**
- Please check in [here](#) within this time period
- After completing check-in, you will be directed to either Avery Dining Hall or Annenberg, where you will set up and settle in

## Food:

- Where: Avery Dining Hall
- **Menu**
  - Friday Night
    - Chicken/Pork Dumplings
    - Pork Bao
    - Veggie Spring Rolls
    - Fried Tofu
  - Saturday Breakfast
    - Assorted Bagels & Cream Cheese
    - Mini Muffins & Danishes
  - Saturday Lunch
    - Vietnamese Banh Mi
  - Saturday Dinner
    - Pasta with Tomato Sauce
    - Meatballs
    - Garlic Bread
  - Sunday Breakfast
    - Bacon/Sausage/Vegetarian/Vegan Breakfast Burritos
- Additional Snacks, Desserts, and Drinks will be provided throughout the duration of the event

## Wifi:

- Username: Hacktech
- Password: HackTechV!sitor

# Competition/Event Rules

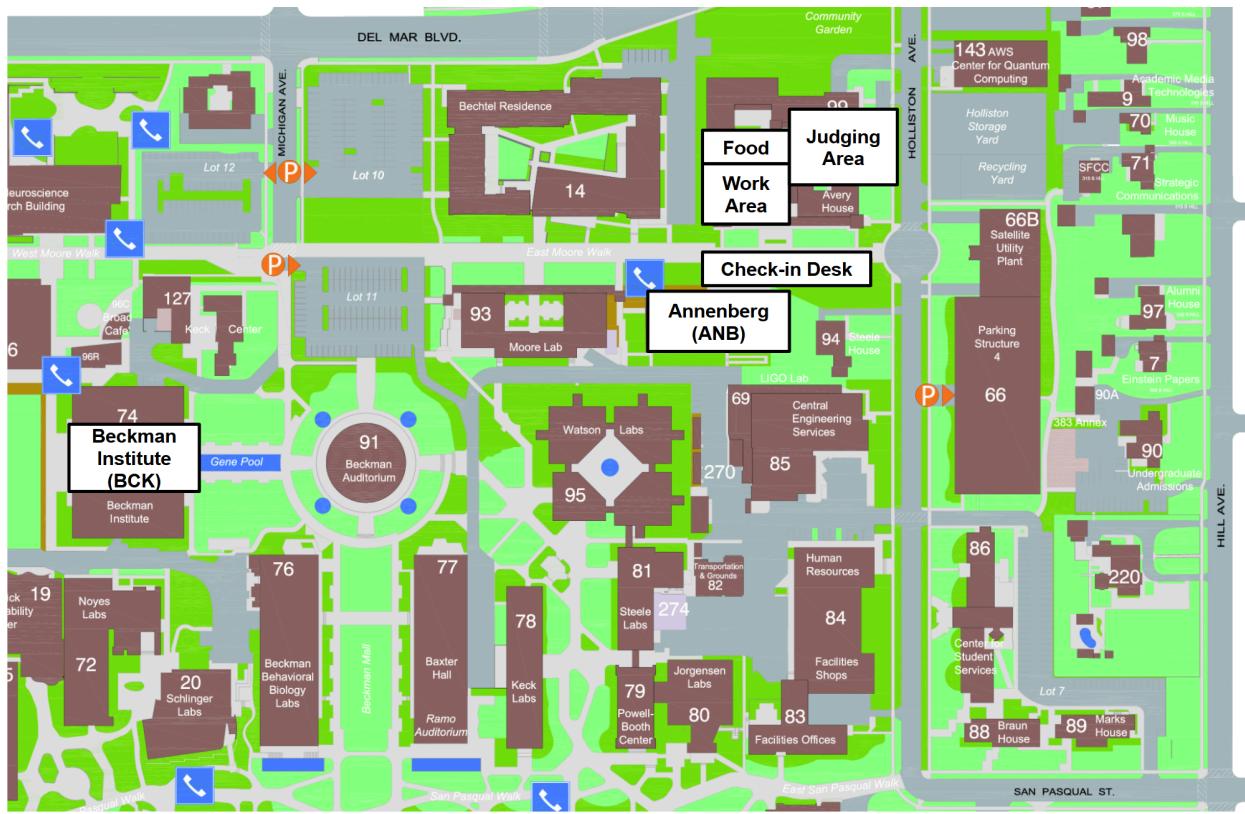
**\*\*\*Note: all days/times given are in Pacific Daylight Time\*\*\***

**Please note: Failure to adhere to rules may result in disqualification.**

## General Rules

- Teams must consist of 1 to 4 individuals.
- All team members must contribute to the group's project.
- Prizes cannot be negotiated.
- Teams may use libraries, frameworks, or open-source code as long as they credit or cite their sources.
- Adding new features to existing projects is allowed but must be clearly identified in the submission and presentation.
- **Hacking must stop by 9:00 AM PDT on Sunday, 4/27/25.**
- **Projects must be submitted to Devpost by 9:00 AM PDT on Sunday, 4/21/24, without exception.**
- **Follow the submission guidelines as posted on the Hacktech Devpost**

## Caltech Campus Map:



# Tracks

- 1) Healthcare
- 2) Sustainability
- 3) Data Analytics/Finance
- 4) [Dryft Challenge](#) (judged by Dryft)
  - a) Learn more about it here:  
<https://dryft.notion.site/Dryft-HackTech-Challenge-2025-Running-Industrial-Operations-on-AI-1c7988445697801cb660d92eee14430b>
- 5) Orkes Conductor Challenge (judged by Orkes)
  - a) Conductor Track Details - Participants need to build their project on Conductor at <https://developer.orkescloud.com/>. Submit your projects including the following details:
  - b) Description of your workflow - Should contain the issue being solved with the workflow, with minimum 3 tasks.
  - c) Screenshot of your workflow execution/Video recording of your project including Conductor part.

# Prizes

Each track will have their own winner. In addition, we will have prizes chosen from across all the tracks for best use of AI, best UI/UX, and most creative tech stack. Each project can win up to 2 times. The exact prize will be announced at the closing ceremony.

To summarize, the awards this year will be:

1. Best Healthcare Project (Chosen only from the Healthcare track)
2. Best Finance/Data Analytics Project (Chosen only from the Finance/Data Analytics track)
3. Best Sustainability Project (Chosen only from the Sustainability track)
4. Best use of AI (Chosen from across all tracks and projects)
5. Best UI/UX (Chosen from across all tracks and projects)
6. Most Creative Tech Stack (Chosen from across all tracks and projects)

Company sponsored Challenges:

7. Wolfram alpha Prize (Chosen from all projects that use the Wolfram language)
8. [Dryft Challenge Prize](#)
9. Vly.ai
10. Orkes Conductor Track Prize
11. Orkes Giveaway Contest (More details to follow)

**Prizes will be revealed at the closing ceremony.** Be sure to attend!

# Judging

## Judging Criteria

All projects will be evaluated based on the following criteria:

- 1) User Experience and Design (10 Points)
  - a) Overall usability and visual appeal of the project. Does it have an intuitive interface that creates an approachable user experience?
- 2) Impact (10 Points)
  - a) Does the project solve a real problem or satisfy an unmet demand?
- 3) Functionality (10 Points)
  - a) How usable is the project in its current state of development?
- 4) Scalability (10 Points)
  - a) How feasible is it to scale this project to meet growing demand for it?
- 5) Presentation and Documentation (5 points)
  - a) Do the participants demonstrate all notable features of their project and provide good instructions regarding how their project should be operated?
- 6) IF APPLICABLE: AI/ML Implementation (10 Points)
  - a) How well does the project integrate and use machine learning techniques?
- 7) IF APPLICABLE: Wolfram Alpha Language Implementation (10 Points)
  - a) How well does the project integrate and use the Wolfram Alpha language?

The average number of points is the score attributed to a project at each stage of judging. **Each project can be chosen for up to two prize categories.**

## Judging Structure

Judges will come up to participants during each round and participants will present their project. Groups/projects that move on to the next round will be announced in the Discord.

First Round (10:00 am - 11:00 am)

- Top 6 teams from each judging group with the highest average scores advance to the next round for their track.
- Top 3 teams from each judging group with the highest score for Best AI/ML implementation advance to the next round
- Top 3 teams from each judging group with the highest score for Best UI/UX advance to the next round
- Top 3 teams from each judging group with the highest score for Most Creative Tech Stack advance to the next round
- Top 3 teams using the Wolfram Language advance to the next round

### **Second Round (11:15 am - 12:15 pm) ~1 hr**

- Top 3 teams from each judging pair with the highest average scores (including the average from the previous round) advance to the next round.
- Top 2 team from each judging pair with the highest score for the AI/ML implementation advance to the next round
- Top 2 team from each judging pair with the highest score for UI/UX advance to the next round
- Top 2 team from each judging pair with the highest score for most creative tech stack advance to the next round

The Wolfram Alpha judge (Mr. Andrew Herrera) will interview the top 3 teams using the Wolfram Language for ~15 minutes and choose a winning project.

### **Third Round (12:30 pm - 2:00 pm) ~ 1.5 hr**

- All judges from a track will convene to interview the 3 teams from their track and pick a winner. Each interview will be around ~15 minutes.
- All projects that have been nominated for an overall prize but have not made it to the third round in their track will project to a group of judges for ~15 minutes.

**Winners will be chosen after the third round. Results will be announced at the closing ceremony.**

# **Speaker: Anima Anandkumar**

**Date: April 26 (Saturday)**

**Time: 1:00 PM - 2:00 PM**

**Location: Beckman Auditorium**



**Speaker Introduction:** Professor Anandkumar (B.S. IIT Madras, M.S. PhD. Cornell) is the Bren Professor of Computing at Caltech, former Director of AI Research at NVIDIA, and was recently named TIME100 Impact Award recipient. She specializes in large-scale machine learning, non-convex optimization and high-dimensional statistics. She has pioneered the development of tensor algorithms, which are essential for processing multidimensional data and achieving massive parallelism in large-scale AI applications. Beyond her academic pursuits, Professor Anandkumar co-founded the AI for Science initiative at Caltech in 2018 and was invited by the Presidential Council of Advisors on Science and Technology on AI+Science in 2023. Notably, Professor Anankumar is the youngest named chair professor at Caltech.

**Seminar Topic:** AI+Science: How can AI make groundbreaking scientific discoveries?

# **Speaker: Kip Thorne**

**Date: April 25 (Saturday)**

**Time: 7:00 PM - 8:00 PM**

**Location: Beckman Institute Auditorium**



**Speaker Introduction:** Professor Kip Thorne (B.S. Caltech, Ph.D. Princeton) won the 2017 Nobel Prize in Physics and is internationally known for his contributions to gravitational and astrophysics. Professor Thorne led the development of the Laser Interferometer Gravitational-Wave Observatory (LIGO) and the team that experimentally detected gravitational waves for the first time in history. He was also the scientific advisor to Christopher Nolan for the 2014 movie Interstellar, and authored best-selling books such as Black Holes & Time Warps.

**Seminar Topic:** The Science Behind Interstellar

# Schedule

## Friday, 4/25

TIME	EVENT	LOCATION
5:00 - 7:00 PM (PDT)	Check-in	Moore Walk
<b>7:00 - 8:00 PM (PDT)</b>	<b>Opening Ceremony</b>	<b>Beckman Institute Auditorium</b>
8:00 - 9:00 PM (PDT)	Intro to Github Copilot (by MLH)	Ann 105
8:00 - 8:45 PM (PDT)	Wolfram Alpha Workshop	Ann 104
8:00 - 8:30 PM (PDT)	Orkes Conductor Challenge Info Session	Ann Conference Room
<b>9:00 PM (PDT)</b>	<b>HACKING BEGINS</b>	
8:00 PM - 9:00 PM (PDT)	Light Foods	Avery Dining

## Saturday, 4/26

TIME	EVENT	LOCATION
7:00 - 9:30 AM (PDT)	Breakfast	Avery Dining Hall
9:00 AM - 5:00 PM (PDT)	Company Career Fair	Beckman Institute Auditorium
11:00 AM- 1:00 PM (PDT)	Lunch	Avery Dining Hall

TIME	EVENT	LOCATION
1:00 - 2:00 PM (PDT)	<b>Keynote:</b> Anima Anandkumar (former Director of ML at NVIDIA, TIME100 Impact Awards)	Beckman Institute Auditorium
2:15 - 3:15 PM (PDT)	<b>Virtual Keynote:</b> Kip Thorne (Nobel Laureate 2017)	Beckman Institute Auditorium
5:00 - 7:30 PM (PDT)	Dinner	Avery Dining Hall

## Sunday, 4/27

TIME	EVENT	LOCATION
<b>9:00 AM (PDT)</b>	<b>PROJECTS DUE</b>	
7:00 - 9:30 AM (PDT)	Breakfast	Avery Dining
10:00 AM - 11:00 AM (PDT)	Judging: Round 1 (Preliminary)	Moore Walk, Bechtel Dining Hall
11:15 AM - 12:15 PM (PDT)	Judging: Round 2 (Semi-Finals)	Annenberg Conference Rooms
12:30 PM - 2:00 PM	Judging: Round 3 (Finals)	Annenberg Conference Rooms
<b>3:00 - 4:00 PM (PDT)</b>	<b>Closing Ceremony</b> Winners Announced	<b>Beckman Auditorium</b>